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PTO/SB/05 (03-01)

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# UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No. 04770.00032

First Inventor Akseli Anttila

Title TUNE ALERTS FOR REMOTELY ADJUSTING A TUNER

Express Mail Label No. EL929162928US

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 14]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 6]
5. Oath or Declaration [Total Pages 2]
  - a. ☒ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for a continuation/divisional with Box 18 completed)
  - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

## ADDRESS TO:

Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

## ACCOMPANYING APPLICATIONS PARTS

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 C.F.R. §3.73(b) Statement [Power of Attorney]  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 [Copies of IDS Citations]
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other: \_\_\_\_\_

18. If a **CONTINUING APPLICATION**, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No. \_\_\_\_\_ / \_\_\_\_\_  
Prior application information. Examiner \_\_\_\_\_ Group / Art Unit. \_\_\_\_\_

For **CONTINUATION** or **DIVISIONAL APPS** only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 17. CORRESPONDENCE ADDRESS

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(Insert Customer No or Attach bar code label here)

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Name (Print/Type)	Charles L. Miller	Registration No. (Attorney/Agent)	43,805
Signature		Date	February 4, 2002

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# FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

Complete if Known

Application Number	
Filing Date	February 4, 2002
First Named Inventor	Akseli Anttila
Examiner Name	
Group / Art Unit	
Attorney Docket No.	04770.00032

TOTAL AMOUNT OF PAYMENT (\$ 1068

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number 19-0733

Deposit Account Name Banner & Witcoff, Ltd

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
101	740	201	370	Utility filing fee	740
106	330	206	165	Design filing fee	
107	510	207	255	Plant filing fee	
108	740	208	370	Reissue filing fee	
114	160	214	80	Provisional filing fee	

SUBTOTAL (1)

(\$ 740

### 2. EXTRA CLAIM FEES

Total Claims	22	-20 **	=	2	X	18	=	36
Independent Claims	6	-3 **	=	3	X	84	=	252
Multiple Dependent					X		=	0

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description
103	18	203	9	Claims in excess of 20
102	84	202	42	Independent claims in excess of 3
104	280	204	140	Multiple dependent claim, if not paid
109	84	209	42	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$ 288

\*\*or number previously paid, if greater, For Reissues, see above

## FEE CALCULATION (continued)

Fee Code	Large Entity Fee (\$)	Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet.	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	920	217	460	Extension for reply within third month	
118	1,440	218	720	Extension for reply within fourth month	
128	1,960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17 (q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	40
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279	370	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

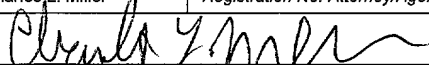
\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$ 40

## SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Charles L. Miller	Registration No. Attorney/Agent)	43,805	Telephone	312.715.1000
Signature				Date	February 4, 2002

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**CERTIFICATE OF MAILING  
(NEW PATENT APPLICATION)**

Express Mail No. EL929162928US

Deposited: February 4, 2002

I hereby certify that the attached correspondence, identified below, is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" under 37 CFR 1.10 on the date indicated above and is addressed to Box Patent Application, Commissioner for Patents, Washington, DC 20231.

By: 

Application of: Anttila et al.

Application No.: n/a

Filing Date: February 4, 2002

Title: Tune Alerts For Remotely Adjusting A Tuner

Transmitted herewith are the following documents:

- X Utility Patent Application Transmittal (1 page) in duplicate
- X Fee Transmittal (1 page) in duplicate
- X Application Data Sheet (3 pages)
- X Specification (14 pages)
- X Formal Drawings (6 pages) Figs. 1-6
- X Executed Declaration (2 pages)
- X Recordation Form Cover Sheet (1 page) in duplicate
- X Executed Assignment (2 pages)
- X Return Postcard

Attorney Case No.: 04770.00032

20040204 "T E 999001"

## **Application Data Sheet**

### **Application Information**

Application number::  
Filing Date:: 02/04/02  
Application Type:: Regular  
Subject Matter:: Utility  
Suggested classification::  
Suggested Group Art Unit::  
CD-ROM or CD-R?:: None  
Number of CD disks::  
Number of copies of CDs::  
Sequence submission?::  
Computer Readable Form (CRF)?::  
Number of copies of CRF::  
Title:: Tune Alerts For Remotely Adjusting A Tuner  
Attorney Docket Number:: 04770.00032  
Request for Early Publication?:: NO  
Request for Non-Publication?:: NO  
Suggested Drawing Figure::  
Total Drawing Sheets:: 6  
Small Entity?:: NO  
Latin name::  
Variety denomination name::  
Petition included?:: NO  
Petition Type::  
Licensed US Govt. Agency::  
Contract or Grant Numbers::  
Secrecy Order in Parent Appl.?:: NO

[illegible]

Applicant Authority Type::	Inventor
Primary Citizenship Country::	South Korea
Status::	Full Capacity
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Name Suffix::	
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State or Province of mailing address::  
Country of mailing address:: Finland  
Postal or Zip Code of mailing address:: 00170

### Correspondence Information

Correspondence Customer Number:: 22907

### Representative Information

Representative Customer Number:: 22907

### Domestic Priority Information

Application::	Continuity Type::	Parent Application::	Parent Filing Date::

### Foreign Priority Information

Country::	Application number::	Filing Date::	Priority Claimed::

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Country of mailing address:: Finland  
Postal or Zip Code of mailing address::

## TUNE ALERTS FOR REMOTELY ADJUSTING A TUNER

### BACKGROUND OF THE INVENTION

### FIELD OF THE INVENTION

- [01] The invention relates to selecting content with a media player. More particularly, the invention relates to systems and methods for sending messages to adjust tuners on remote media players.

### DESCRIPTION OF RELATED ART

- [02] Consumer electronic devices allow users to enjoy an ever-increasing amount of broadcast content. Broadcast content includes radio content, television content, streaming audio and video content and other content that may be processed by a media player. Users of media players often wish to alert other users of broadcast content that they enjoy or find interesting. For example, a person listening to a particular radio broadcast may hear content that the person thinks that his or her friend may be interested in receiving or a person viewing a digital video broadcast may wish to alert coworkers of a work related broadcast. People also enjoy discussing broadcasts with others who have also viewed or listened to the same broadcast.
- [03] A conventional approach to alerting users of media players to broadcasts is for a first user to utilize a telephone device to call and describe the broadcast to a second user. One drawback of this approach is that it is burdensome to the first user and may cause the first user to miss part of the broadcast while describing the broadcast to the second user. Moreover, while wanting to alert the second user, the first user may not want to initiate a conversation that may move on to other topics.
- [04] As a result, there is a need in the art for systems and methods that allow users of media players to alert other users of broadcasts in an efficient and timely manner.

## BRIEF SUMMARY OF THE INVENTION

- [05] One or more of the above above-mentioned needs in the art are satisfied by the disclosed systems and methods for sending and processing tune alert messages. The messages may be sent directly from a media player while observing broadcast content and may be formatted to automatically adjust the configuration of another media player. The disclosed tune alert messages may be quickly formatted and transmitted to minimize interruptions to users observing broadcast content.
- [06] In a first embodiment of the invention, a method of transmitting a tune alert message from a first media player to a second media player is provided. First, broadcast content is presented to a user of the first media player. A tune alert message formatted to reconfigure the second media player to provide the content to a user of the second media player is generated at the first media player. The tune alert message is then transmitted from the first media player.
- [07] In another embodiment of the invention, a method of adjusting a configuration of a media player to receive broadcast content is provided. First, the media player receives a tune alert message formatted to reconfigure the media player to provide the broadcast content to a user of the media player. The tune alert message is then presented to a user of the media player. Finally, the media player is reconfigured to process the broadcast content.
- [08] In yet another embodiment of the invention, a media player configured to receive messages and programming content is provided. The media player includes a message module that receives a message transmitted to the media player and identifying a source of broadcast content. A tuner that is adjustable is provided to process content received from a plurality of different sources of broadcast content. The media player also includes a tune alert module configured to adjust the tuner to process content received from the content source identified in the message.



- [09] In other embodiments of the invention, computer-executable instructions or control logic for implementing the disclosed methods are stored on computer-readable media or implemented with hardware modules.
- [10] Other features and advantages of the invention will become apparent with reference to the following detailed description and the figures.

#### BRIEF DESCRIPTION OF THE DRAWINGS

- [11] The present invention is illustrated by way of example and not limited in the accompanying figures in which like reference numerals indicate similar elements and in which:
- [12] Figure 1 shows a system for viewing broadcast content and transmitting tune alert messages between media players, in accordance with an embodiment of the invention;
- [13] Figure 2 shows an embodiment in which a media player transmits a tune alert message directly to another media player, in accordance with an embodiment of the invention;
- [14] Figure 3 illustrates a method of sending, receiving and processing tune alert messages, in accordance with an embodiment of the invention;
- [15] Figure 4 shows a user interface screen used to send tune alert messages, in accordance with an embodiment of the invention;
- [16] Figure 5 shows a user interface screen used to select user preferences, in accordance with an embodiment of the invention; and
- [17] Figure 6 shows a tune alert message displayed on a display screen of a portable audio/video device, in accordance with an embodiment of the invention.

## DETAILED DESCRIPTION OF THE INVENTION

- [18] In the following description of the various embodiments, reference is made to the accompanying drawings which form a part hereof, and in which is shown by way of illustration various embodiments in which the invention may be practiced. It is to be understood that other embodiments may be utilized and structural and functional modifications may be made without departing from the scope of the present invention.
- [19] Figure 1 illustrates a system for viewing broadcast content and transmitting tune alert messages between media players in accordance with an embodiment of the invention. A media player 102 receives content broadcasted by a broadcast source 104. As used herein, a media player is not limited to a particular software implementation and may be implemented with a hand-held wireless device, a set-top box coupled to a television or monitor, a computer device, or any other electronic component that presents audio and/or visual content to a user and transmits messages to other media players. Media player 102 may also be implemented with a mobile telephone device, such as a Nokia Mobile Communicator. While observing content broadcasted by broadcast source 104, media player 102 may transmit a tune alert message to message server 106. Message server 106 may relay messages between media players 102 and 108. In addition, a tune alert filter module 106a may be included to filter messages before they are transmitted to media players. The filtering of tune alert messages will be apparent from the description provided below.
- [20] In operation, while listening to a radio broadcast, media player 102 may transmit a tune alert message to media player 108 via message server 106. The tune alert message may be formatted to automatically tune media player 108 to the broadcast identified in the tune alert message. Media players 102 and 108 may be implemented with different devices that operate with different protocols or formats. In one aspect of the invention, message server 106 stores information relating to the formats and

protocols used by each of the media players. After receiving a message from a first media player, message server 106 may reformat the message, when necessary, before transmitting the message to a second media player.

- [21] Figure 2 illustrates an embodiment in which a first media player 202 transmits a tune alert message 204 to another media player 206. Figure 2 shows an embodiment in which the transmission path between media players includes the Internet 208. Media players 202 and 206 receive digital video broadcasted from a satellite 210. Media players 202 and 206 include transceiver modules 212 and 214 for sending and receiving messages. In one aspect of the invention, transceiver modules 212 and 214 are implemented with conventional modem units for sending content across the Internet 208. In an alternative embodiment, media players 202 and 206 may communicate directly using Bluetooth, IrDa or other known protocols or components that allow for communications without an external network or server.
- [22] Each media player may also include a tuner module 216 and 218 for selecting broadcast content. One skilled in the art will appreciate that tuner modules 216 and 218 may be implemented with a variety of different content selection devices that are chosen based on the particular application. For example, tuner modules 216 and 218 may be implemented with frequency selection devices or modules used to select a particular transmission stream or packet identifier from digital video broadcast.
- [23] Tune alert modules 220 and 222 may be included to format and process tune alert messages. Tune alert module 220 may format tune alert message 204 to include the information shown in figure 2 in a manner that can be processed or deciphered by media player 206. Tune alert message 204 may be formatted in accordance with message platforms that include, but are not limited to SMS, Bluetooth, XML and MMS (Multimedia Messaging System). Tune alert module 222 may include hardware and/or software components for the processing of tune alert messages and, when appropriate, adjusting the configuration of tuner 218. Media player 206 may also include a memory 224. Memory 224 may be used to store tune alert messages,

preference parameters or other information and may be used by media player 206. Media player 202 may also include a similar memory.

- [24] Media player 202 and 206 may also include audio/video generators 226 and 228 for creating audio and/or video signals that may be presented to users. For example, audio/video generator 228 may create an NTSC signal that may be used by a conventional television 230. Of course, one or both of media player 202 and 206 may also include speakers, a microphone, a display screen or any other component used to present audio and/or video content. Moreover, media player 202 and 206 may also include a variety of additional components that are unrelated to the transmission and reception of tune alert messages, such as telephone components and any additional components and modules conventionally associated with personal digital assistants, digital video processing devices and wireless devices.
- [25] Figure 3 illustrates a method for sending, receiving and processing tune alert messages in accordance with an embodiment of the invention. First, in step 302, broadcast content is presented to a user of a first media player. Step 302 may include displaying a television broadcast, presenting multimedia content, generating sound from a radio broadcast or any other form of presenting broadcast content. Content may also be in the form of promotional content or advertisements. In one aspect of the invention, promotional content is selected and transmitted to media players based, at least in part, on the locations of the media players. Location information may be determined by a GPS receiver, may be based on the location of a current cell or may be determined by other means. In one embodiment, a user manually enters location information, which may be stored in a profile. Next, in step 304 the first media player generates a tune alert message formatted to reconfigure the second media player.
- [26] Figure 4 illustrates a user interface screen that may be used to send a tune alert message. A "Send To" field 402 may contain a list of users known to the first user. Each of the listed users may have a corresponding recipient ID, such as an Internet protocol (IP) address or telephone number. The first user may select one of the

individuals listed or, alternatively, address the tune alert message to a user not listed in field 402. Next, an "Action Option" field 404 identifies an urgency of the tune alert message. In particular, the sender can request that the recipient of the tune alert message tune to the broadcast immediately, at a predetermined time, when convenient or at any other time identified by the sender of the tune alert message.

- [27] The sender of the tune alert message may also include profile information characterizing the content in a "Profile Information" field 406. Of course, there exists a variety of different types of information that may be included within profile information. In one embodiment, the profile information is compared to preference information in another mobile terminal. The sender of the tune alert message may also elect to insert a message by making the appropriate selection and then entering the appropriate information in an "Insert Message" field 408.
- [28] Returning to figure 3, in step 306, the tune alert message is transmitted from the first media player. In one embodiment, step 306 may be performed after a user sending the message selects a send button 410 (shown in figure 4). In step 308, at least one parameter of the tune alert message is compared to at least one preference parameter provided by a user of the second media player. Step 308 may be performed at a media player. Alternatively, step 308 may be performed at a message server to limit the number of messages transmitted to a media player.
- [29] Figure 5 illustrates a user interface screen that may be used to provide preference information. A "Block All From" field 502 allows the user to identify other users from whom the user does not desire to receive tune alert messages. An "Allow All From" field 504 allows the user to identify other users from whom all tune alert messages will be processed. One skilled in the art will appreciate that there are numerous preference options they can be used to block or filter tune alert messages. For example, an "Allow All" field 506 and a "Block All" field 508 may be used to provide preferences for filtering messages based on one or more characteristics of the content identified in the messages.

- [30] Returning once again to figure 3, in step 310 the tune alert message is presented to a user of the second media player. Figure 6 illustrates a tune alert message 600 displayed on a screen of a portable audio/visual device. Tune alert message 600 includes information identifying the source of the message and the type of content being broadcasted. Tune alert message 600 also includes buttons allowing the second user to decide how to respond to the message. A tune now button 602 may be selected to tune to the broadcast identified in the message. After the user selects tune now button 602, in step 312 the second media player is reconfigured to process the content identified in tune alert message 600. In one aspect of the invention, the second media player may be configured to automatically tune to broadcasts identified in tune alert messages without any further action by the user of the second media player. This feature may be set by making an appropriate preference selection.
- [31] A delete button 604 may be selected to delete the tune alert message. A bookmark button 606 may be included to bookmark the source of the content. In one aspect of the invention, tune alert message 600 is displayed for a predetermined period of time and then erased from the display screen.
- [32] The present invention is not limited to embodiments that include communication between two mobile terminals. In one embodiment of the invention (not shown), a media player may poll for tune alert messages either in response to a manual request from a user or in accordance with a rule set by the user. A media player may send preference information to a central server. The central server may store tune alert messages with corresponding metadata that may be matched to the preference information. When a match is found, the central server may then send one or more tune alert messages to the requesting media player. In a similar alternative embodiment, tune alert messages may be requested from other entities, such as a group of peers with matching taste in content, a particular broadcaster or a local Bluetooth or WLAN device, such as a media player using Bluetooth to broadcast a tune alert message. Among other advantages, requesting tune alert messages

empowers users to find content at a particular time which best suits his or her preference for receiving and optionally consuming the content.

- [33] While the invention has been described with respect to specific examples, those skilled in the art will appreciate that there are numerous variations and permutations of the above described systems and techniques that fall within the spirit and scope of the invention as set forth in the appended claims. For example, the disclosed methods may be implemented as computer-executable instructions recorded on a computer readable medium such as a floppy disk or CD-ROM or as specified hardware, such as an ASIC or FPGA.

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## We Claim:

1. A method of transmitting a tune alert message from a first media player to a second media player, the method comprising:
  - (a) presenting broadcast content to a user of the first media player;
  - (b) generating at the first media player a tune alert message formatted to reconfigure the second media player to provide the content to a user of the second media player; and
  - (c) transmitting the tune alert message from the first media player to the second media player to provide broadcast content to a user of the second media player.
2. The method of claim 1, wherein the tune alert message comprises at least one content selection configuration parameter of the first media player.
3. The method of claim 1, wherein the content comprises audio content received from a radio broadcast source.
4. The method of claim 1, wherein the content comprises audio-visual content received from a video broadcast source.
5. The method of claim 1, wherein the tune alert message comprises an identification of a content source.
6. The method of claim 5, wherein the tune alert message further comprises profile information to characterize the broadcast content.
7. The method of claim 1, wherein (c) comprises transmitting the tune alert message from the first media player to a message server.
8. A method of adjusting a configuration of a media player to receive broadcast content, the method comprising:



- (a) receiving at the media player a tune alert message formatted to reconfigure the media player to provide the broadcast content to a user of the media player;
- (b) presenting the tune alert message to a user of the media player; and
- (c) reconfiguring the media player to process the broadcast content.

9. The method of claim 8, further including: after (b) receiving an input from the user accepting or denying the tune alert message; and wherein (c) comprises reconfiguring the media player to process the broadcast content only when the user accepts the tune alert message.

10. The method of claim 8, wherein the tune alert message comprises configuration parameters of another media player.

11. The method of claim 8, wherein the content comprises audio content received from a radio broadcast source.

12. The method of claim 8, wherein the content comprises audio-visual content received from a video broadcast source.

13. The method of claim 8, wherein the tune alert message comprises an identification of a content source.

14. The method of claim 8, further including before (b):  
comparing at least one parameter of the tune alert message to at least one preference parameter provided by a user of the media player.

15. The method of claim 8, wherein the broadcast content comprises promotional content.

16. A media player configured to receive messages and broadcast content; the media player comprising:

a communication module that receives a message identifying a source of broadcast content;

a tuner that is adjustable to process content received from a plurality of different sources of broadcast content; and

a tune alert module configured to adjust the tuner to process content received from the content source identified in the message.

17. The receiver of claim 16, wherein the tuner processes radio content.

18. The receiver of claim 16, wherein the tuner processes video content.

19. The receiver of claim 16, wherein the tuner process multimedia content.

20. A computer-readable medium containing computer-executable instructions for causing a first media player to perform the steps comprising:

(a) presenting content to a user of the first media player;

(b) generating at the first media player a tune alert message that may be used to reconfigure a second media player to provide the content to a user of the second media player; and

(c) transmitting the tune alert message from the first media player to the second media player to provide the broadcast content to a user of the second media player.

21. A media player comprising:

a means for selecting content to present to a user;

a means for transmitting tuning information that corresponds to the content and is formatted to be used to tune a remote device.

22. A mobile terminal comprising:

a transceiver module that sends and receives messages;

a tuner module configurable to select broadcast content;

a tune alert module coupled to the tuner module and the transceiver module, the tune alert module generating tune alert messages that are formatted to adjust a tuner module of another mobile terminal; and

an audio/video generation module for receiving the broadcast content from the tuner and providing audio and video signals to output devices.

20040220 "T E S T E R"

**Abstract of the Invention**

Methods and systems are provided for alerting users of audio and/or video broadcasts. A user of a first media player may create a tune alert message and transmit the message to a second media player. The second media player may parse or decipher the message and reconfigure a tuner module to receive and process the identified content.

2010-02-20 10:00:00

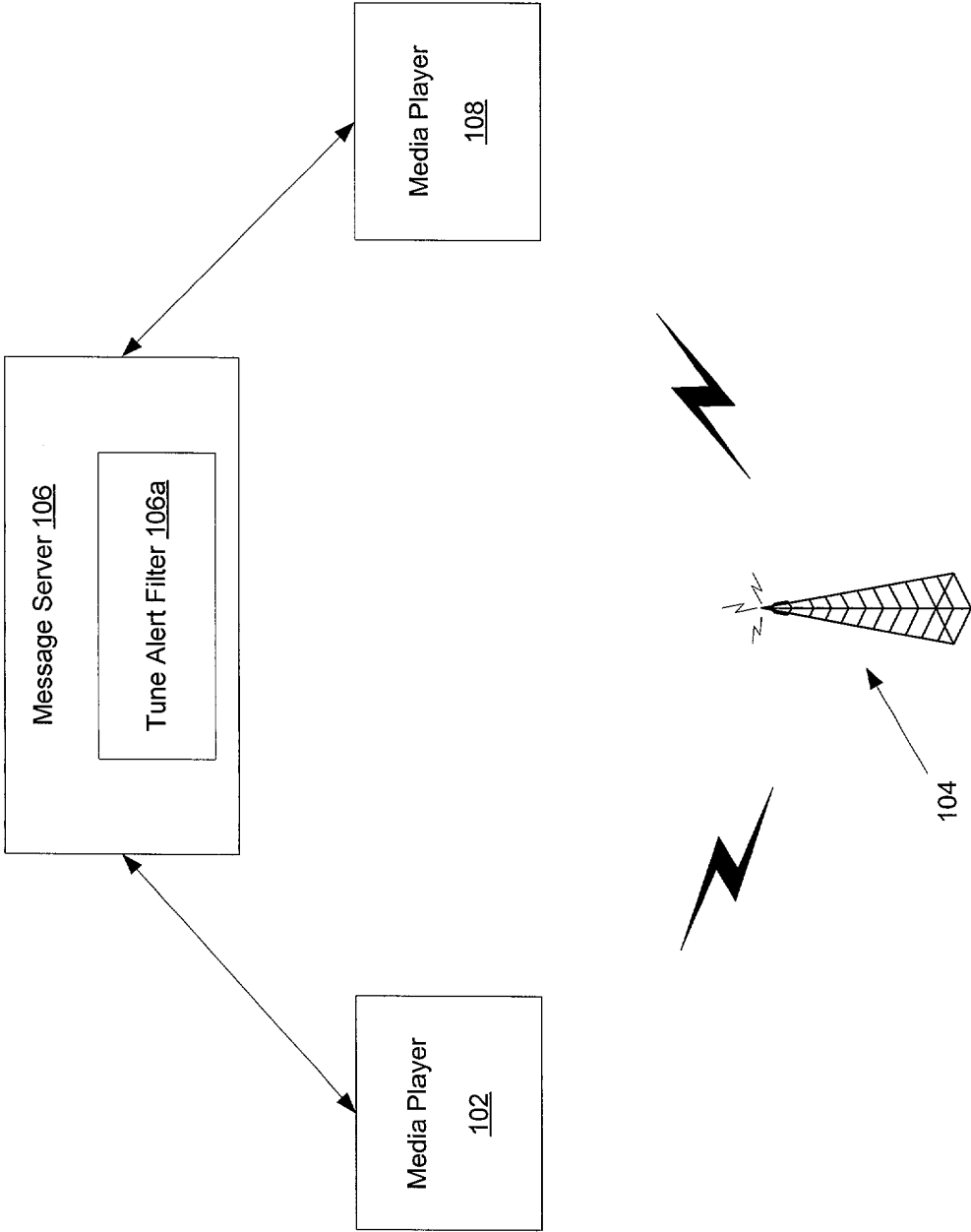


Figure 1

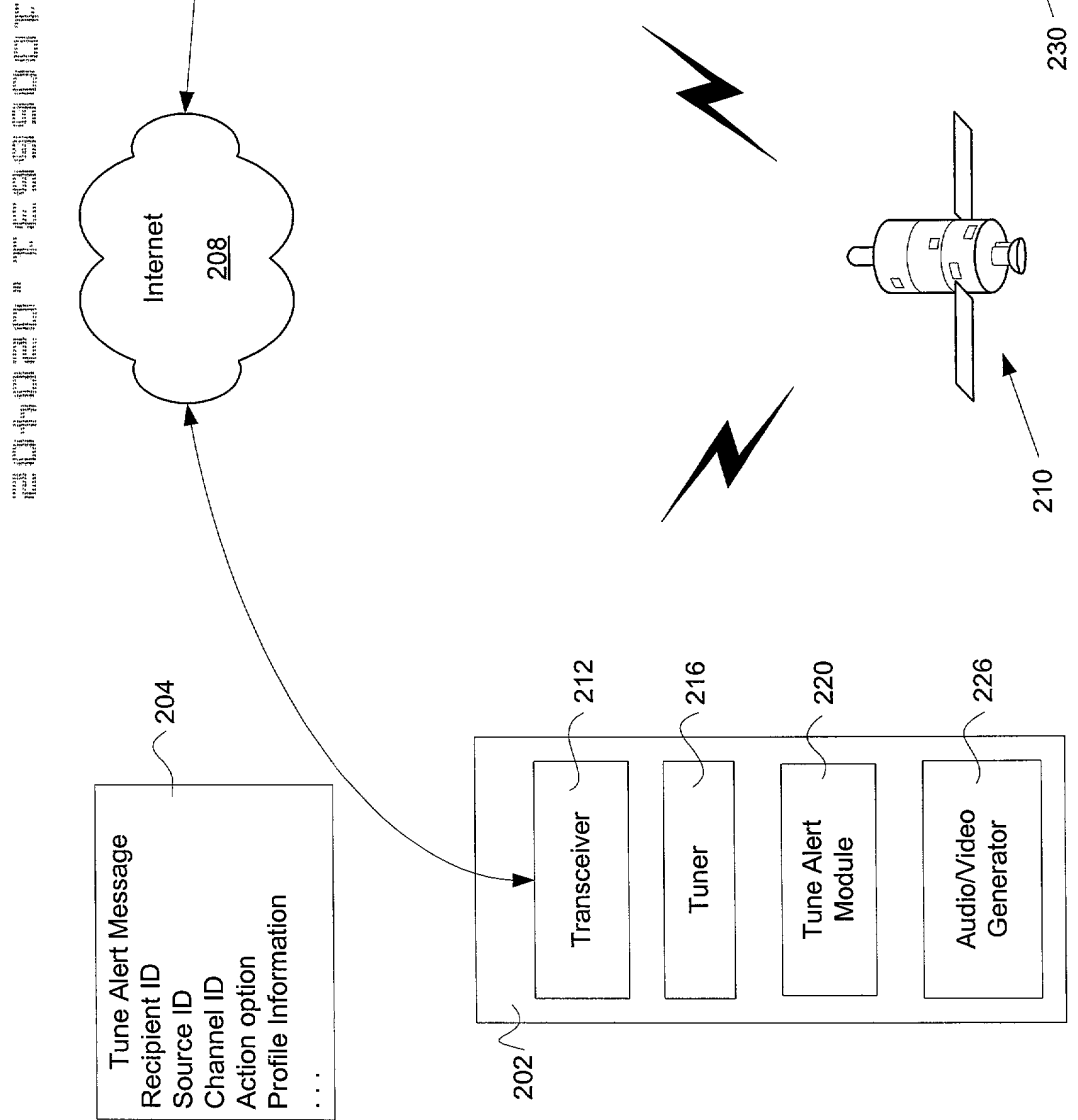


Figure 2

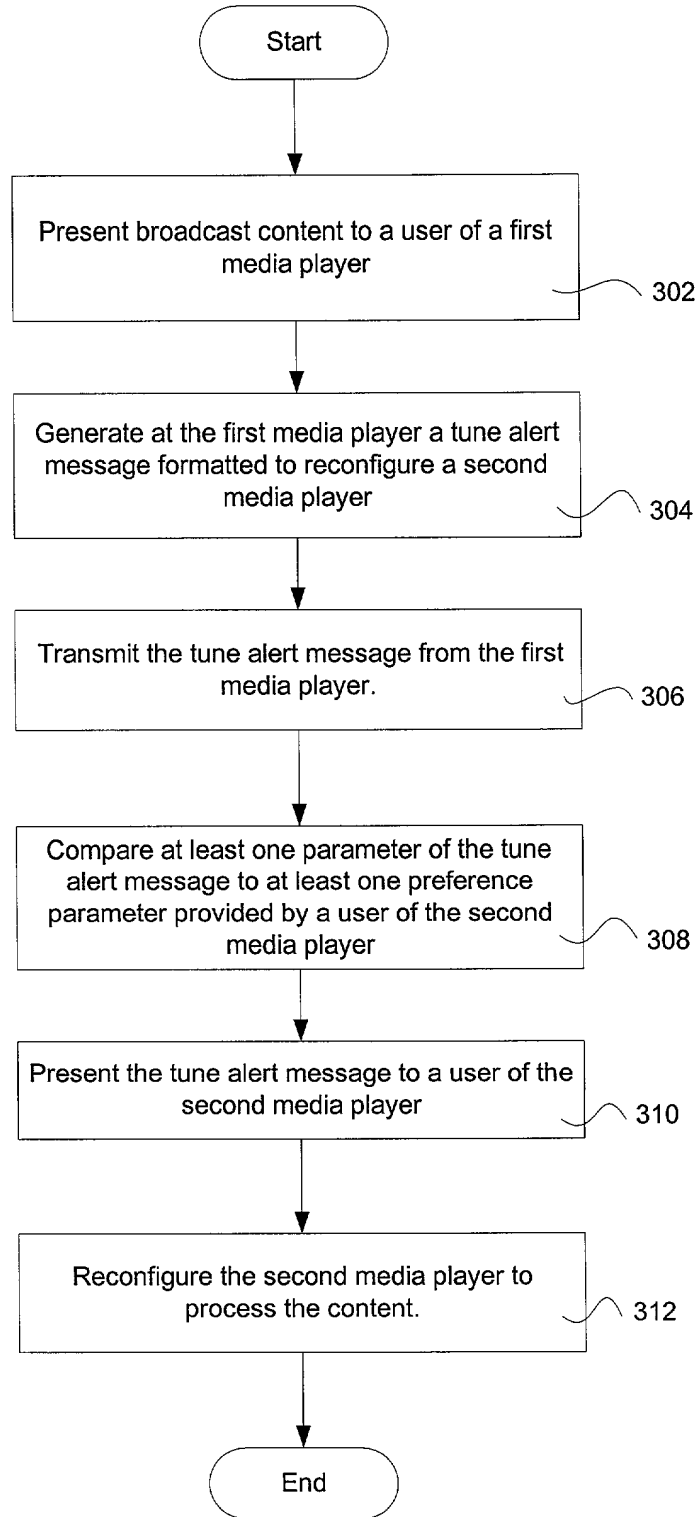
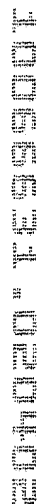


Figure 3



Variable	Mean	SD	Min	Max
Age	38.5	10.5	25	55
Gender	0.5	0.5	0	1
Marital status	0.5	0.5	0	1
Education	12.5	1.5	10	15
Income	1.5	0.5	1	2
Health status	0.5	0.5	0	1
Stress level	2.5	1.5	1	4
Life satisfaction	3.5	1.5	1	5
Work satisfaction	3.5	1.5	1	5
Family satisfaction	3.5	1.5	1	5
Community satisfaction	3.5	1.5	1	5
Overall satisfaction	3.5	1.5	1	5



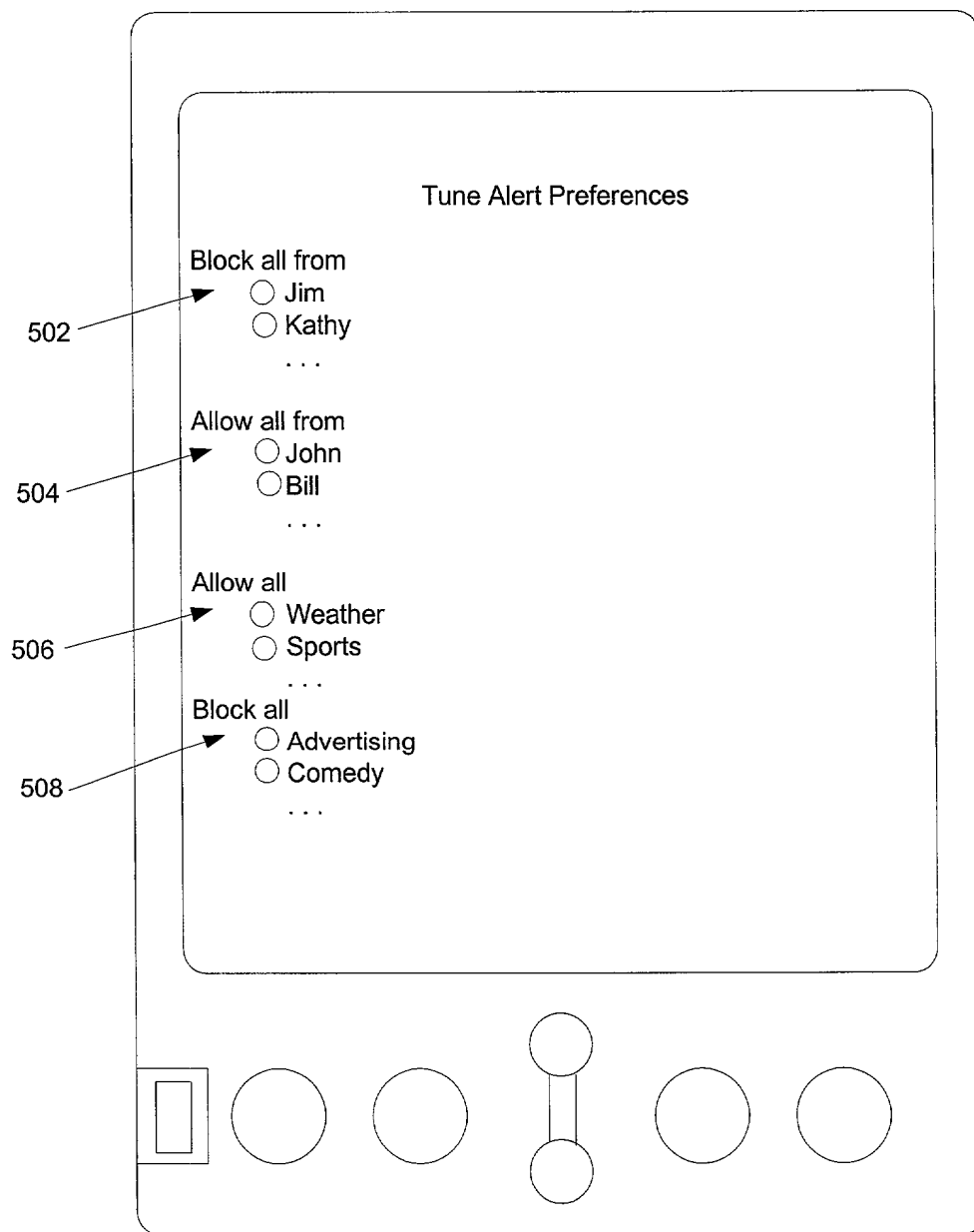


Figure 5

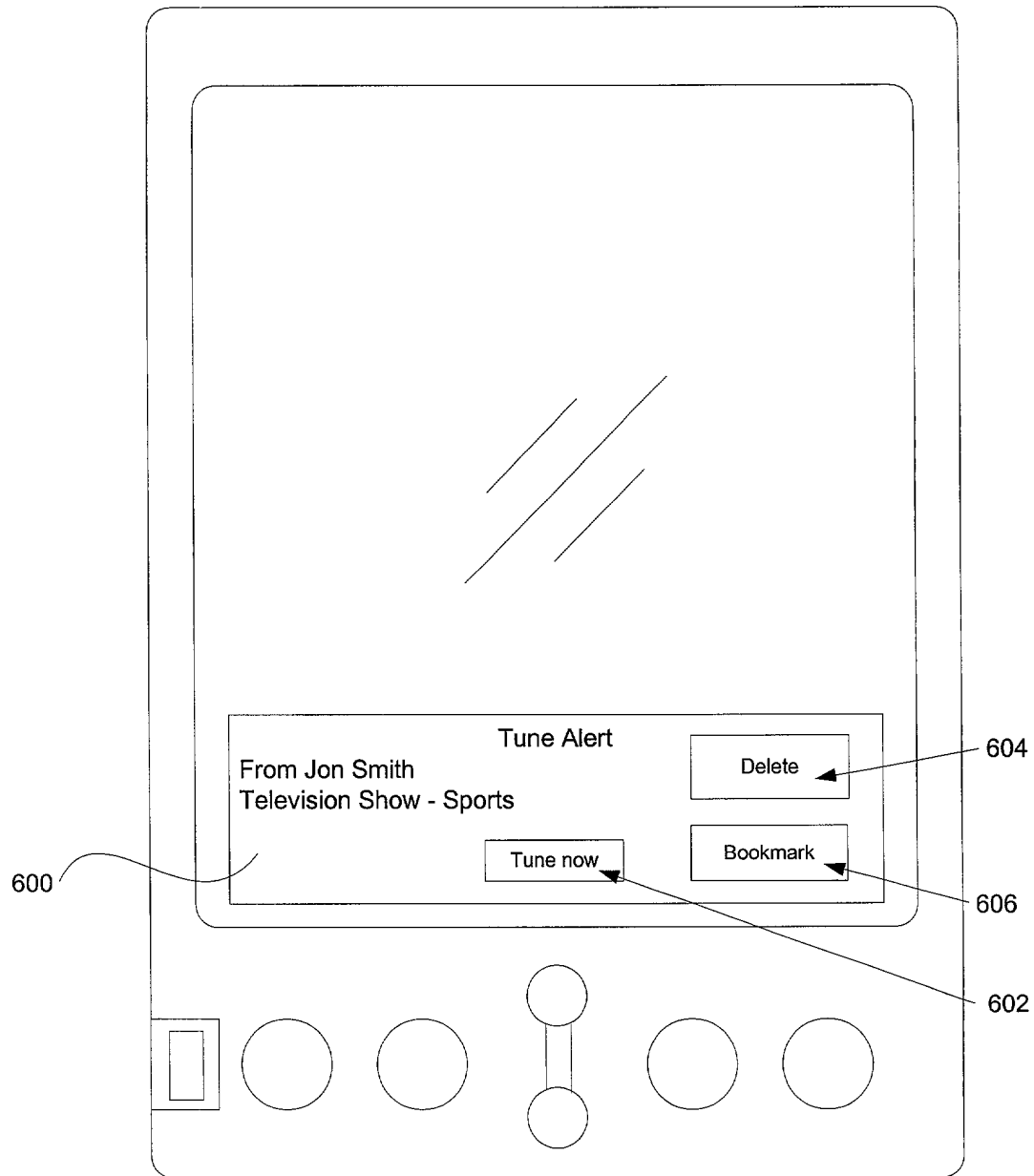


Figure 6

Banner & Witcoff Ref. No. 04770.00032  
Client Ref. No. NC 28557

## JOINT DECLARATION FOR PATENT APPLICATION

As the below named inventors, we hereby declare that:

Our residence, post office address and citizenship are as stated below next to our names;

We believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled TUNE ALERTS FOR REMOTELY ADJUSTING A TUNER, the specification of which:

X is attached hereto.

was filed on \_\_\_\_\_ as Application Serial Number \_\_\_\_\_ and was amended on \_\_\_\_\_ (if applicable).

was filed under the Patent Cooperation Treaty (PCT) and accorded International Application No. \_\_\_\_\_, filed \_\_\_\_\_, and amended on \_\_\_\_\_ (if any).

We hereby state that we have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We hereby acknowledge the duty to disclose information which is material to patentability in accordance with Title 37, Code of Federal Regulations, 1.56(a).

### Prior Foreign Application(s)

We hereby claim foreign priority benefits under Title 35, United States Code, 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application(s) for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Country	Application No.	Date of Filing (day month year)	Date of Issue (day month year)	Priority Claimed Under 35 U.S.C. 119

### Prior United States Provisional Application(s)

We hereby claim priority benefits under Title 35, United States Code, 119(e)(1) of any U.S. provisional application listed below:

U.S. Provisional Application No.	Date of Filing (day month year)	Priority Claimed Under 35 U.S.C. 119(e)(1)

### Prior United States Application(s)

We hereby claim the benefit under Title 35, United States Code, 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, 112, we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application Serial No.	Date of Filing (Day, Month, Year)	Status X Patented, Pending, Abandoned


Banner & Witcoff Ref. No. 04770.00032  
Client Ref. No. NC 28557


### Power of Attorney

We hereby appoint, both jointly and severally, as our attorneys, all Banner & Witcoff, Ltd. attorneys indicated therein under PTO Customer Number #22907, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office. All correspondence and telephone communications should be addressed to:

Bradley C. Wright  
Banner & Witcoff, Ltd.  
Customer Number: 22907

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

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